Drought Information Statement for Eastern Missouri/Western Illinois

Current Status, Impacts, and Outlook

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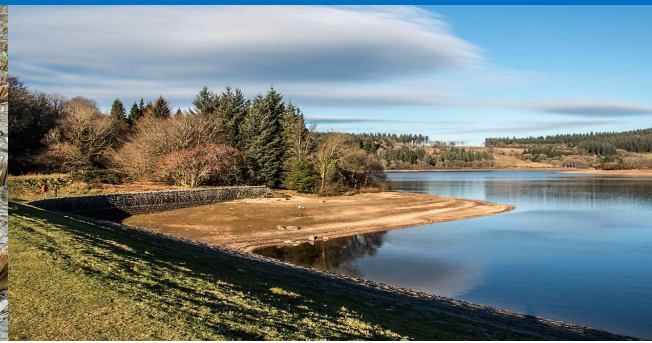


U.S. Drought Monitor

Latest U.S. Drought Monitor Map

- Drought intensity and Extent
  - D3 Extreme Drought: southeastern Knox, southern Lewis, Shelby, Marion, northeastern Monroe, northeastern Audrain, parts of Ralls, and western Pike counties counties in Missouri as well as far southwestern Adams county in Illinois.
  - D2 Severe Drought: northwestern Knox, northern Lewis, southwestern Monroe, central Audrain, western Pike, northern Montgomery, western Lincoln, northwestern Warren, Moniteau, Cole, and Osage counties in Missouri and western Adams county in Illinois.

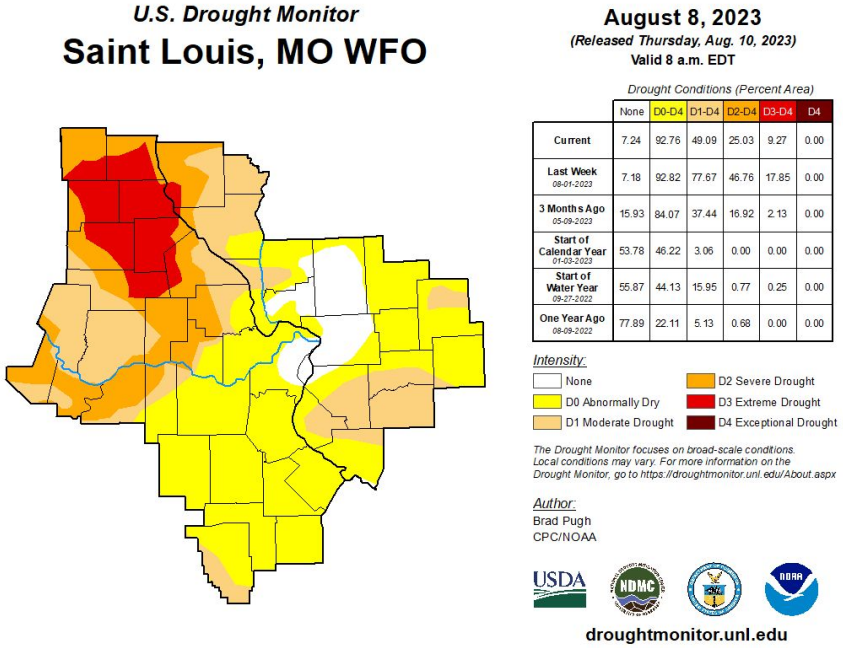


Image Caption: U.S. Drought Monitor valid 8am EDT August 8th.

Recent Change in Drought Intensity

- Four Week Drought Monitor Class Change.
  - **Drought Worsened**: Macoupin county and other small pats of the area.
  - **No Change**: Parts of northeast Missouri and west-central Illinois.
  - **Drought Improved**: Much of central and southeast Missouri as well as southwest Illinois.

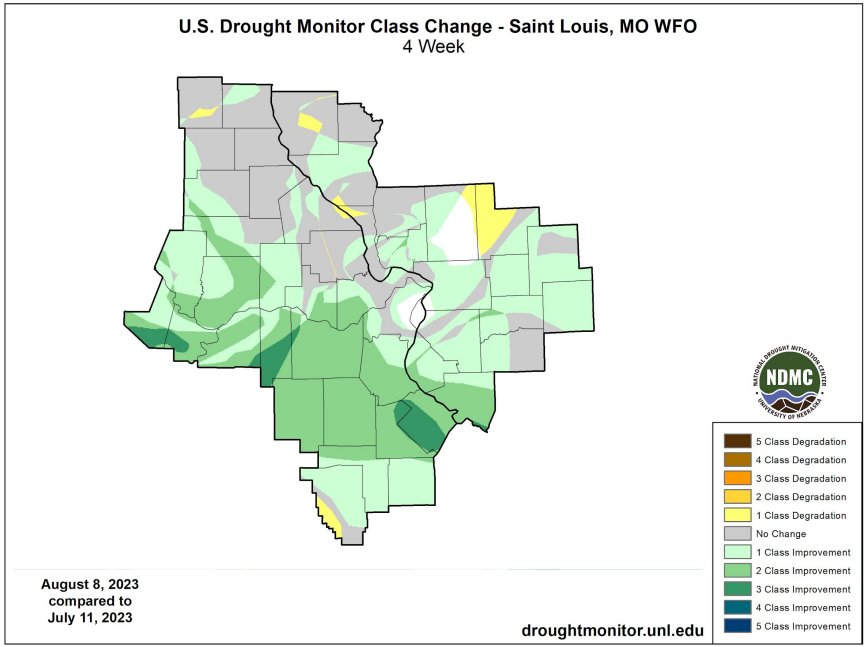


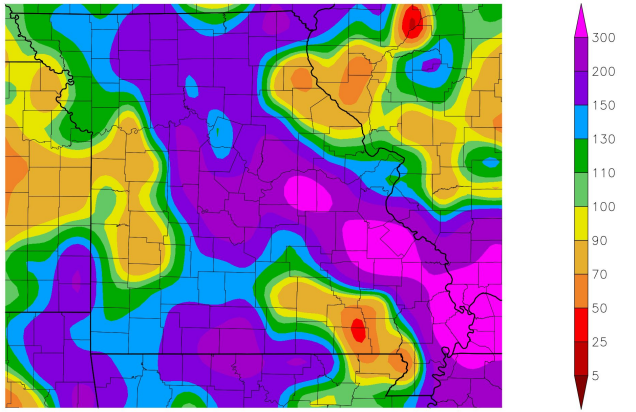
Image Caption: U.S. Drought Monitor 4-week change map valid 8am EDT August 8th.

Precipitation

Main Takeaways

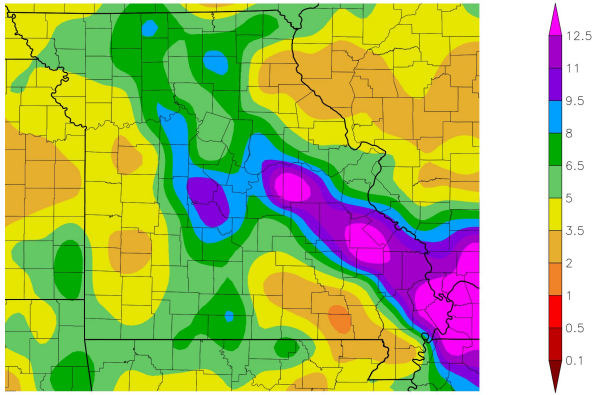
- Very wet weather has occurred over parts of central and southeast Missouri where 200-300+% of normal fell.
- However, there were some dry areas, including parts of northeast Missouri and west-central Illinois where less than 50% of normal rain was observed over the past 30 days.

Percent of Normal Precipitation (%)
7/12/2023 – 8/10/2023



Generated 8/11/2023 at HPRCC using provisional data.

Precipitation (in)
7/12/2023 – 8/10/2023



NOAA Regional Climate Centers '11/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:
Left - Precipitation Amount for Missouri and western Illinois
Right - Percent of Normal Precipitation for Missouri and western Illinois
Data Courtesy High Plains Regional Climate Center.
Data over the past 30 days ending August 10, 2023

Temperature

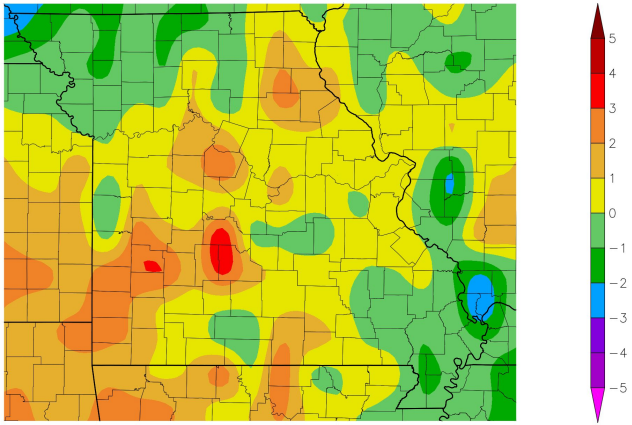
Main Takeaways

- Main Takeaway
- Main Takeaway

Possible Impact

Possible Impact Goes Here

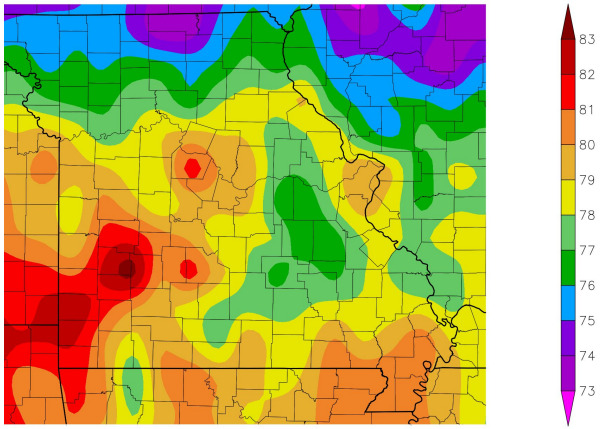
Departure from Normal Temperature (F)
7/12/2023 – 8/10/2023



Generated 8/11/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Temperature (F)
7/12/2023 – 8/10/2023



2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:
Left - Average Temperature
Right - Departure from Normal Temperature
Data Courtesy High Plains Regional Climate Center.
Data over the past 30 days ending Month, DD, YYYY

Summary of Impacts

Hydrologic Impacts

- Low pond levels continue

Agricultural Impacts

- Poor pasture conditions (big improvements though over the past 1-2 weeks)
- Poor corn and soybean conditions (improvements though noted in soybeans recently)
- Very low/poor hay supply
- Low stock water supplies

Fire Hazard Impacts

- There are no known impacts at this time.

Other Impacts

- There are no known impacts at this time.

Mitigation actions

- Please refer to your municipality and/or water provider for mitigation information.

Hydrologic Conditions

Main Takeaways

- Low ponds
- Potential for navigation issues in the months ahead on the big rivers (especially Mississippi)

Impacts

Recent heavy rainfall has led to a rapid improvement on area streamflows. A majority of the area now has above to well-above normal flows. Only a couple of sites are below normal (25th percentile) across the area, including the North River at Palmyra (21st percentile), Macoupin Creek near Kane, IL (21st percentile), and the Kaskaskia River at Vandalia (23rd percentile).

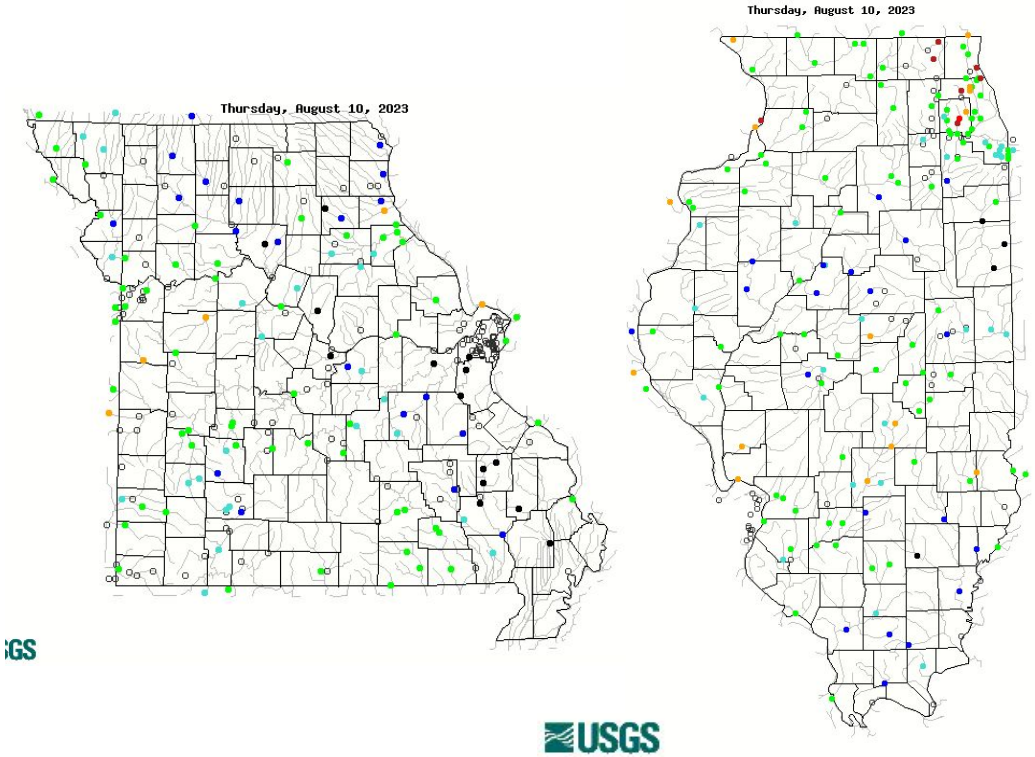


Image Caption: USGS 7 day average streamflow HUC map valid August 10, 2023

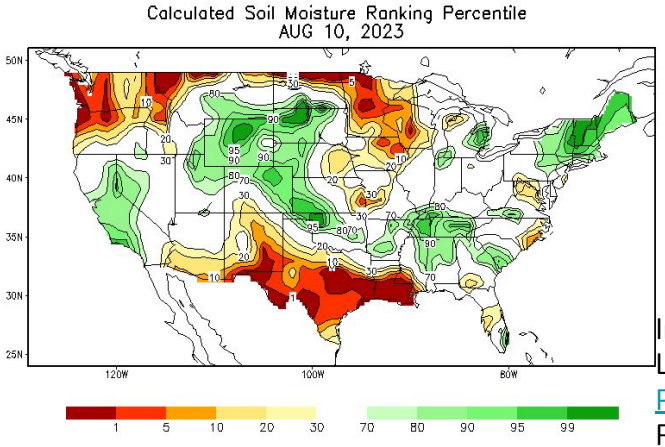
Agricultural Impacts

Main Takeaways

- Poor pasture conditions
- Poor corn crop
- Very low hay supply
- Low stock water supplies

Impacts

- In Missouri,
  - Pasture conditions: 33 percent very poor, 25 percent poor.
  - Corn: 17 percent very poor, 26 percent poor.
  - Soybeans: 11 percent very poor, 23 percent poor.
  - Hay supply: 49 percent very short, 32 percent short.
  - Stock water supplies: 26 percent very short, 28 percent short.



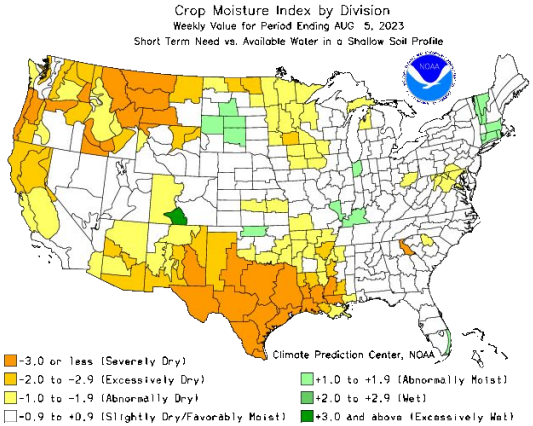


Image Captions:
Left: CPC Calculated Soil Moisture Ranking Percentile valid August 10, 2023
Right: Crop Moisture Index by Division. Weekly value for period ending August 5, 2023

Seven Day Precipitation Forecast

- Next 7 days:
  - Near to above normal rainfall is forecast over the next week. The best chances of 1.50+” of rain are in parts of central and southeast Missouri.
  - Some further improvement in drought conditions are certainly possible in areas that end up observing above 1.50” of rain.

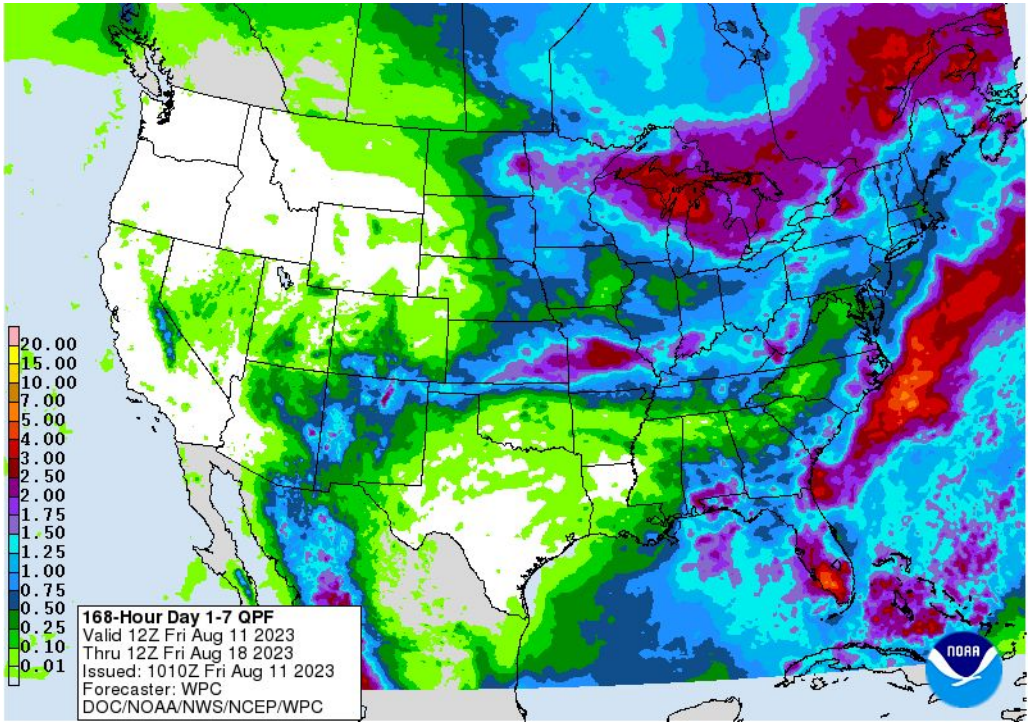


Image Caption: Weather Prediction Center 7-day precipitation forecast valid Friday August 11 to 18

6-10 Day Outlook

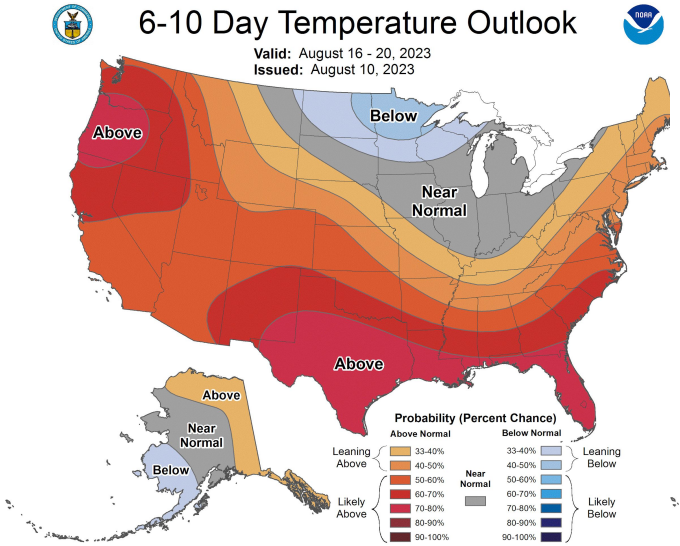
Temperature and Precipitation Outlook

Main Takeaways

- A slight tilt toward below normal rainfall is forecast over the 6-10 day period.
- Near to slightly above normal rainfall is also favored.

Possible Impact

Likely no significant changes to ongoing drought conditions.



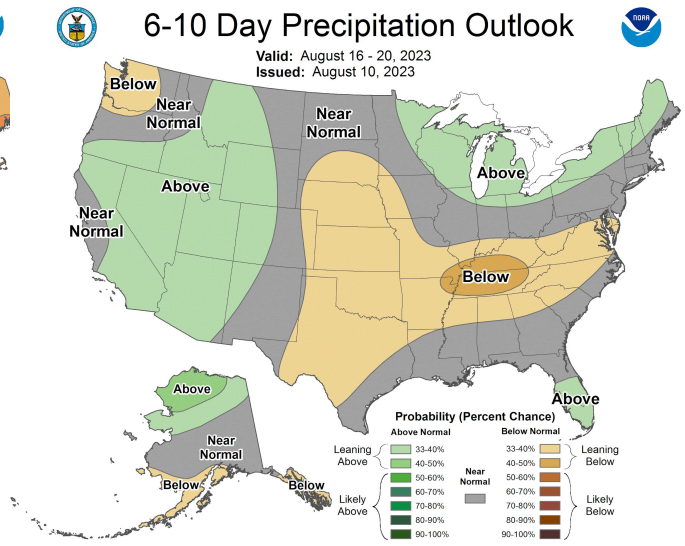


Image Captions:
Left - Climate Prediction Center 6-10 Day Temperature Outlook.
Right - Climate Prediction Center 6-10 Day Precipitation Outlook.
Valid August 16 to 20.

8-14 Day Outlook

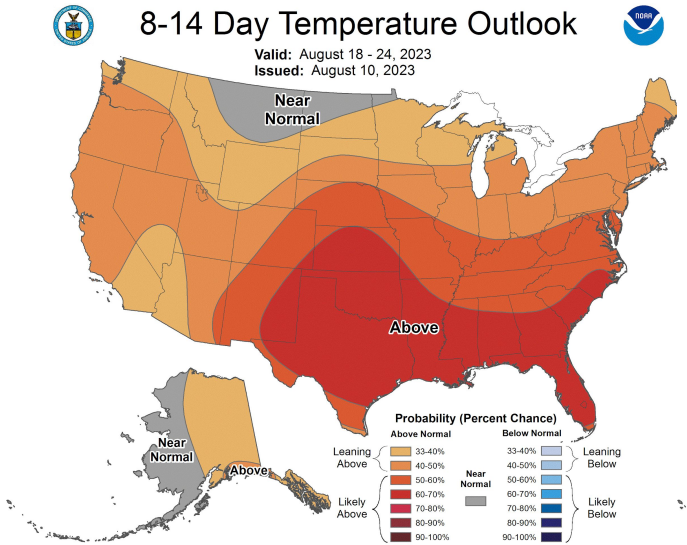
Temperature and Precipitation Outlook

Main Takeaways

- Below normal rainfall is forecast in the 8-14 day period.
- Above normal temperatures are also favored.

Possible Impact

Likely no big changes to existing drought conditions.



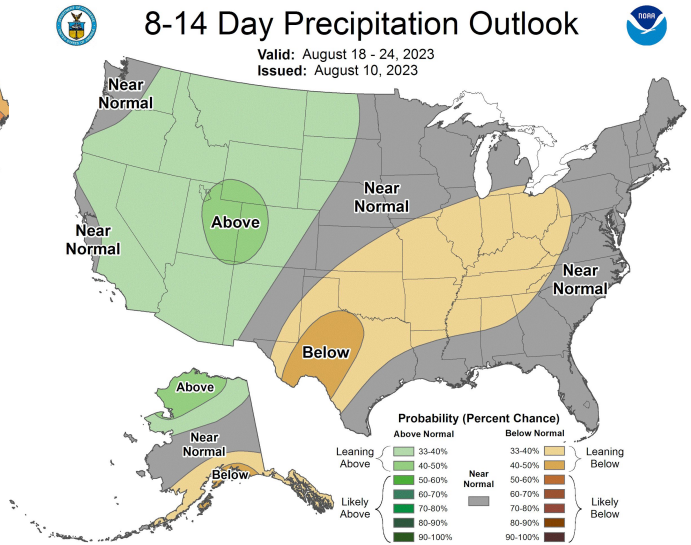


Image Captions:
Left - Climate Prediction Center 8-14 Day Temperature Outlook.
Right - Climate Prediction Center 8-14 Day Precipitation Outlook.
Valid June August 18 to 24.

Seasonal Climate Outlook

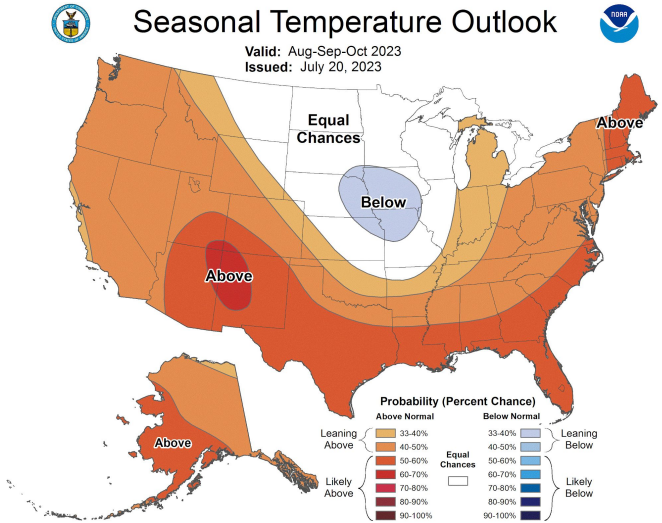
Seasonal Temperature and Precipitation Outlook

Main Takeaways

- Near normal temperatures are favored to end summer and begin fall.
- Wetter than normal conditions are predicted for the entire area again.

Possible Impact

A tilt to above normal rainfall in the August-October months should help continue to ease drought conditions across the area.



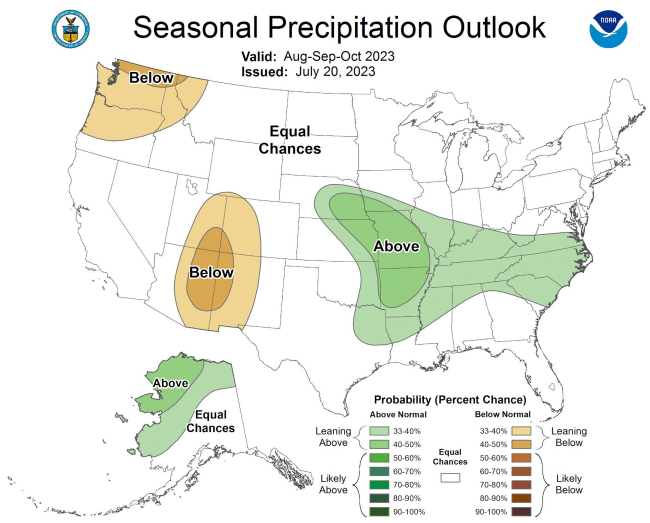


Image Captions:
Left - Climate Prediction Center Seasonal Temperature Outlook.
Right - Climate Prediction Center Seasonal Precipitation Outlook.
Valid August through October 2023.